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#### ST. AUGUSTINE

# REPORT UPON HER PRESENT SANITARY CONDITION

BY

JOHN S. BILLINGS, M.D.

SURGEON U. S. ARMY, AND DIRECTOR OF THE LABORATORY
OF HYGIENE, UNIVERSITY OF PENNSYLVANIA

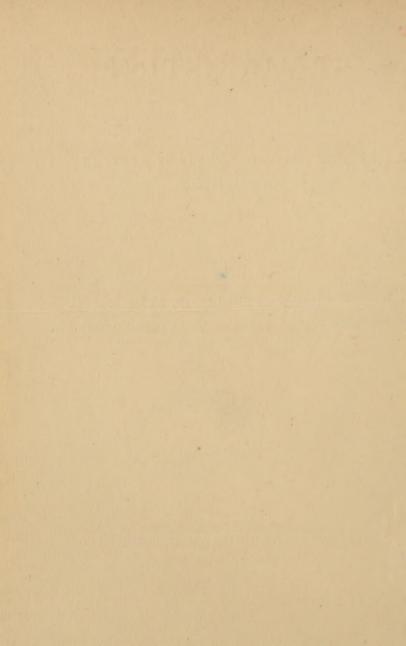


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WASHINGTON, D. C., June 13, 1892.

A. Anderson, M.D., F. Fremont-Smith, M.D., Physicians to Hotels Ponce de Leon, Alcazar, and Cordova.

GENTLEMEN: In compliance with your request I give the following as the result of a careful investigation of the sanitary condition of the Hotels Ponce de Leon, Alcazar, and Cordova, in St. Augustine, Fla., and of such accounts of the cases of fever which occurred in guests of these hotels during the spring of 1892, as it has thus far been possible to obtain. I am satisfied that no one of these cases of fever was caused by the water-supply, or by the drainage of the buildings, or by anything connected with them or their surroundings. The watersupply has been examined chemically and bacteriologically, the plumbing and house drainage of each hotel have been carefully scrutinized, the sources of milk-supply, of ice, and of fresh vegetables for the use of the guests of these hotels have been investigated, and no causes of disease have been found in any of them. There have been no cases of typhoid fever among the residents of St. Augustine during the past year, and the general sanitary condition of the town is excellent.

Between December 15, 1891, and April 25, 1892, about 25 cases of typhoid fever are reported as having occurred in about 25,000 persons who visited St.

Augustine. Fourteen of these cases occurred among visitors while they were in town, and eleven are said to have occurred from two to three weeks after the patients had left the town. In addition to the above, four cases are reported in hotel servants, and one in a nurse. Seven of the cases in visitors while in the town were in the Hotels Ponce de Leon, Alcazar, and Cordova; and six of the cases reported in persons who had been gone from two to three weeks, were also in guests of these three hotels. In all, therefore, out of about 16,000 guests of these hotels, thirteen are reported as having been affected with typhoid. The investigation into the details of these cases is not vet completed, and I can only say now, that it is probable that two or three of them were not typhoid fever at all, that two of them were ill on the day of their arrival, which illness became well-marked typhoid five days later, and therefore was not contracted at St. Augustine, and that of all the cases at the above-mentioned hotels, there were among the guests but three which it would seem must have been contracted during their stay in St. Augustine. The four servants affected with typhoid probably had the specific cause introduced into their bodies through contact with a fever case, or cases, or with soiled linen from such case.

Every educated physician will understand from the above figures the extreme improbability that so few cases, scattered over a period of two months, and giving a ratio of less than one to a thousand people exposed, could have been due to anything in the structure of the buildings, the general water-supply, or the food, milk,

or ice; and the detailed investigation of all these things makes it practically certain that no cases of typhoid was due to any of them.

Whether the investigation now in progress into the history of the reported cases will indicate the source of the disease, is of course doubtful, and probably the cases had no common source, but were each contracted at a different time and in a different place. But knowing, as I do, the great interest in these Southern winter health-resorts felt by a large number of Northern invalids, it has seemed best to make this preliminary statement in order to assure them that they can make their plans for going to St. Augustine next winter with perfect confidence; that while absolute security can be had nowhere, so long as they are there, they will probably be less liable to be exposed to the contagion of typhoid fever than they would be if they remained at home.

(Signed) JOHN S. BILLINGS, M.D., Surgeon U. S. Army, and Director of the Laboratory of Hygiene, University of Pennsylvania. St. Augustine, Fla., October 29, 1892.

A. Anderson, M.D., F. Fremont-Smith, M.D., Physicians to Hotels Ponce de Leon, Alcazar, and Cordova.

GENTLEMEN: I certify that I have this day completed an examination of the Hotels "Ponce de Leon," "Alcazar," and "Cordova," in St. Augustine, and that they are in excellent sanitary condition throughout. In each of these hotels the plumbing is in good order, the soil-pipes are properly ventilated and trapped off from the sewers. All fixtures are of good quality, properly trapped, and the traps are ventilated. The pipes are of excellent quality and well put together with tight joints. All wastes from the ice-boxes, refrigerators, and safes are entirely disconnected from the soil-pipes and sewers, and discharge on the surface. Each sewer from the hotels has at its upper end an automatic flush-tank which at intervals of two hours discharges 1,400 gallons of water rapidly into the pipe, thus securing a scouring flush which washes the contents into the river.

I do not think that there is any risk of the escape of sewer-air or soil-pipe air into any part of either of these hotels. All water-closets, bath-rooms, and sink-rooms, including those for the servants, as well as those for the guests, are clean and in good order. I have been beneath each of the buildings and have examined the sur-

face of the soil and the pipes lying beneath the floors. All the pipes are tight—there are no signs of any leaky or defective joints, and no odors. The surface of the ground is covered with clean, dry, shelly sand. The space beneath the floor of the kitchen of the "Cordova" is now entirely free from nuisance of any kind, and all openings in the kitchen floor have been closed.

There is no reason to suppose that the water-supply of the hotel has at any time been contaminated—both that furnished from the artesian wells and that from the rain-water cisterns are free from danger so far as contamination with disease germs is concerned. In my opinion there is nothing about the hotels at the present time which can be considered as dangerous to the health of the inmates.

(Signed) JOHN S. BILLINGS, M.D., Director of the Laboratory of Hygiene, University of Pennsylvania. and the state of t

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